

REMARKS

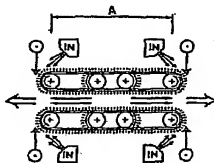
The drawings were amended, per the previous Submission with the Applicant's response of December 27, 2006, and New Replacement Sheets of formal drawings, including additional FIGS. 4A and 8A were included thereon. The Applicant has canceled these previously submitted Figures, and in view of the fact that both new Figures were included on the same Replacement Sheet, no further Replacement Sheets are believed necessary. If any further amendment to the drawings is believed necessary, the Examiner is invited to contact the undersigned representative of the Applicant to discuss the same.

Claims 41, 45, 50 and 76 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for the reasons noted in the official action. The rejected claims are accordingly amended or canceled, by the above claim amendments, and the presently pending claims are now believed to particularly point out and distinctly claim the subject matter regarded as the invention, thereby overcoming all of the raised § 112, second paragraph, rejections. The entered claim amendments are directed solely at overcoming the raised indefiniteness rejections and are not directed at distinguishing the present invention from the art of record in this case.

The claims 41, 42, 45, 46, 50, 76 and 77 are rejected, under 35 U.S.C. §§ 102 and 103(a), as being anticipated, and in the alternative rendered obvious, by the Ingromat-Cleaner CH 29 publication 04 and/or Herrington '413. The Applicant acknowledges and respectfully traverses all of the raised rejections in view of the following remarks.

As the Examiner is undoubtedly aware, in order to properly support an anticipation rejection under 35 U.S.C. § 102, the cited reference must disclose, teach or at least suggest each and every feature of the presently claimed invention. As an initial matter the Applicant points out that the Ingromat-Cleaner CH 29 publication 04 reference, hereinafter, the Ingromat reference, arguably discloses a number of devices for cleaning a workpiece. On each of the top and bottom of the workpiece as it passes through the device is a pair of oppositely

rotating and completely offset brushes carried by a conveyor. Importantly, it is the brushes *on the same side*, i.e. top or bottom, of the workpiece which are completely offset, and rotating in opposite directions. Accordingly, the respective brushes on the top of the workpiece in this reference correspond directly, i.e., they are not offset at all, with the corresponding brushes disposed on the opposite bottom side of the workpiece. Furthermore, the corresponding brushes on either side of the workpiece rotate in an opposite direction as seen in the diagrammatic figures in the upper right hand side of, for example, pages 11 and 17:



This means that the brushes which do not correspond, i.e., are offset on different sides of the workpiece, are rotating in the *same* direction. This is entirely different from the present invention which both describes and claims that the offset brushes (which are located on different sides of the workpiece) rotate in the opposite direction as described in the Applicant's specification,

[059] As can be seen from Fig. 1 and Fig. 3, the conveyor devices 2 are arranged slightly offset with respect to one another in the direction in which the workpiece 1 passes through. The offset in the direction of passage may in this case be, for example, 10 to 100 mm, preferably 30 mm. This therefore on the one hand ensures that the respective brushes 3 of the conveyor device 2 do not impede one another, and on the other hand also ensures a uniform and balanced pressure of the brushes 3 of the conveyor devices 2, balancing one another so that the workpiece 1 does not tend to become tilted.

In this regard, the Applicant points out that claim 46 specifically recites the features . . . wherein the first and the second conveyor devices (2, 2) rotate in opposite directions and the first conveyor device (2) machines the first main surface of the workpiece (1) while the second conveyor device (2) machines the second main surface of the workpiece (1), and the first and the second conveyor devices (2) are arranged slightly offset with respect to one another in the advance direction in which the workpiece (1) passes through.

In other words, nowhere in the applied Ingromat reference is there disclosed off-set brushes or conveyors which rotate in opposite directions on opposite sides of the workpiece as specifically claimed by the Applicant.

With respect to the obviousness rejection, Herrington '413 is an old and obsolete reference and structurally entirely different from the Ingromat reference such that no one of skill in the art would ever consider combining the two references, much less using any teaching or suggestion from such ancient art. Even if such a reference as Herrington '413 is combinable with the Ingromat reference, and the Applicant does not concede such a combination, the combination would undoubtedly be limited to the aspect noted by the Examiner that Herrington '413 arguably discloses the removing of scale from a metal. However, from a structural and functional aspect, these two references are entirely structurally unique and incompatible with one another particularly in view of the nature of the single axle brushes in Herrington '413 contrasted with the conveyor belt carried brushes of Ingromat-Cleaner CH 29 publication, not to mention the single-sided application of Herrington '413 to the workpiece.

Herrington '413 discloses nothing with respect to brushes on both sides of the workpiece other than discussing at column 4, line 70, that another step of the production line could incorporate a similar apparatus to that as shown in the FIGS. 1-5 of Herrington '413. Further, even if these references could be structurally combined, the combination would still fail to disclose, teach or suggest in any manner the above described feature of the present invention where opposing brushes on either side of the workpiece are not only offset, but also

rotate in opposite directions as claimed. Therefore, the Applicant believes that claim 46 is neither anticipated, nor obvious in view of the applied art both under 35 U.S.C. §§ 102 and 103(a).

Claim 76, a method claim, has been amended to include the further steps of
... aligning the first and second conveyor devices in an offset manner along a travel direction of the workpiece on the respective first and second sides of the workpiece and aligning the third and fourth conveyor devices in an offset manner along the travel direction of the workpiece on the respective first and second sides of the workpiece; and ensuring contact between the at least one brush (3) of the first, the second, the third and the fourth conveyor devices (2, 2, 2, 2) along *the entire respective first and second surface of the workpiece.*

Again, neither of the references either alone or in combination disclose the features relating to the offset and opposite rotational nature of the opposing conveyor devices. Nor, as will be discussed in further detail below, is there any disclosure, teaching or suggestion relating to the complete working of the entire surface of the workpiece by each conveyor brush as now recited in claim 76.

Therefore, in view of the above amendments and remarks, the Applicant respectfully requests withdrawal of the anticipation and obviousness rejections of the above noted independent claims.

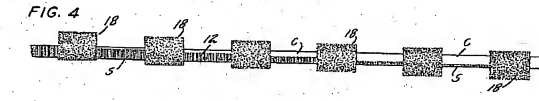
Next, claims 39, 40, 43, 44, 48, 49, 53, 56-61, 63, 64 and 71-75 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over the Ingromat reference or alternatively the Ingromat reference in view of Herrington '413, and further in view of either McCormick et al. '882 or Derby '166. The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the above amendments and the following remarks.

First in regards to the Ingromat reference alone, where the prior art document discloses two conveyor devices positioned on the same side of the workpiece and rotating in opposite

directions for merely cleaning the workpiece, the Applicant notes that each of these conveyor devices are only positioned for cleaning approximately one-half of a desired surface of the workpiece. Essentially each conveyor in Ingromat cleans the surface from the middle of the workpiece to the edge. This can be seen best on page 11 and page 17 of the Ingromat reference. Furthermore, it is stated in the description on the upper left, line 4, of page 11 *Wischrichtung von Plattenmitte zu Plattenrand* and similarly page 17, upper left, line 4, *Wischrichtung von Bandmitte zu Bandrand*. *Wischrichtung von Plattenmitte zu Plattenrand* means "direction of cleaning from the middle of the plate to the edge of the plate", *Wischrichtung von Bandmitte zu Bandrand* means "cleaning direction from the middle of the web to the edge of the web". Again, it can be seen from the pictures on pages 11 and 17 and from the drawing on the upper side on the right side of these pages that each adjacent conveyor device is only cleaning from the middle of the web or plate to the edge. This makes sense because the conveyor devices are only used for cleaning. Therefore, it is helpful to have shorter lengths or runs in which to make the web or plate dust free. In any event, both the Wandres-L5 and Ingromat-cleaner are using conveyor devices which rotate in opposite directions starting from the middle of the web to the edge, the Wandres-L5 and the Ingromat-cleaners do not disclose, teach or suggest any information in regards to constructing a conveyor device which rotate in opposite direction on each side and positioned so that both conveyor devices are treating the first main surface of a workpiece along the entire length of the workpiece.

Even the combinations of Ingromat and Herrington and further in view of McCormick et al. '882 and Derby '166 reference fail to disclose or teach all the claimed features of the Applicant's invention as recited in claim 39. The combination of Ingromat and Herrington '413 does not disclose the features of the present invention, in fact, both references disclose treating, or brushing, only a portion of the length and/or width of the surface of the workpiece, as shown in Herrington's FIG. 4 below, which teaches directly away from the present

invention as recited in claim 39 wherein, "the first, second, third and the fourth conveyor devices (2, 2) both rotate so as to guide the brushes (3) along an *entire length* of the workpiece".



Similarly, new claim 78 specifically recites the feature wherein, "... the first and second conveyor devices (2,2) rotate in opposite directions and are positioned for respectively treating the first and second main surface of the workpiece (1); and the first and second conveyor devices (2, 2) both rotate so as to guide the brushes (3) along an entirety of the first and second main surface of the workpiece".

Turning to McCormick et al. '882, first of all, the removal of loose dust particles from cut or sawn corrugated paper is entirely different from the process of removing a chemically formed oxide layer from a metal workpiece. Such a device performs no actual work on the corrugated material and thus is little more than an automated whisk broom. Furthermore, these brushes are shown directly opposite one another and brush only the cut side of the partition strip and not the main surface of the workpiece as specifically recited in claim 39. Thus, even if this reference can be combined with the aforementioned references, and the Applicant adamantly asserts that it cannot be, the combination of the Ingromat reference, Herrington '413 and McCormick et al. '882 still fails to disclose the features as recited in claim 39.

Derby '166, on the other hand, and completely different from any of the noted references, contemplates and teaches finishing only one side of a wood workpiece, again entirely different from the mechanical process of removing an oxide layer from both sides of a metal workpiece. It is the Applicant's position that this 1896 reference is so old and directed

to an entirely different field so as to ensure that no person of skill in the art of metal-working would look at any such reference much less combine the reference with the disclosures of and Ingromat, Herrington '413 and McCormick et al. '882. The setup and positioning of the workpiece on the guides of McCormick et al. '882 which only permits working of one side of the workpiece further distances this reference from any combination with Ingromat.

With respect to the Application of these four (4) substantially different and individual references, the Applicant submits that how such disparate structures are to be combined with the structure of the previous reference Ingromat is not evident nor explained. There is no teaching found to suggest that any of the cited art should be considered with respect to one another. From the piecemeal assembly of the prior art, it appears this combination is at best a shopping spree as evidenced by the cascading of references used to support the rejections. The teaching of the combination of elements claimed by the present invention is not found anywhere but in the instant disclosure. That these individual elements can be found piecemeal in various prior art teachings and then combined can only be done through hindsight. It is a simple matter for the Examiner to explore the present teaching and then, with this information in hand, scour the prior art to find the individual elements. A holding that combination claims are invalid based merely upon finding similar elements in separate prior art patents would be contrary to statute and would defeat the congressional purpose in enacting Title 35.

For example, see *In re Geiger* Unpublished decision (12/11/86)

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination" Judge Archer . . . Judge Newman found that the applicant had shown, by evidence, that his system had superior properties not rendered obvious by the cited references.

The requirements necessary to support a conclusion that a claim is directed to "obvious" subject matter is found in *Ex parte Clapp*, 227 USPQ 927 (TTAB 1985).

[T]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. See *In re Laskowski*, 10 USPQ 1397, 1398, (Fed. Cir. 1989), citing *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

With further reference to *Ex parte Clapp*, Supra, at 973:

To support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references....It is to be noted that simplicity and hindsight are not proper criteria for resolving the issue of obviousness.

And, as stated in *Connell v. Sears, Roebuck and Co.*, 722 F.2d 1542, 1549, 220 USPQ 193, 199 (Fed. Cir. 1983):

The test is whether the claimed invention as a whole in light of all the teachings of the references in their entireties, would have been obvious to one of ordinary skill in the art at the time the invention was made.

A precise statement as to the impropriety of a rejection, under 35 U.S.C. §103 is found in the opinion of the CCPA rendered in the decision of *In re Linnert*, 309 F.2d 498, 503; 135 USPQ 307, 311 (1962):

Viewed in the light of the appellants' specification, the solution to the problem . . . may seem obvious over the combined teaching of the references. Such a hindsight analysis, however is not allowed by 35 U.S.C. §103 which requires a comparison of the prior art and the invention as a whole at the time the invention was made.

The CCPA went on to state:

It is easy now to attribute to this prior art the knowledge which was first made available by appellants and then to assume that it would have been

obvious to one having the ordinary skill in the art to make these suggested reconstructions. While such a reconstruction of the art may be an alluring way to rationalize a rejection of claims, it is not the type of rejection which the statute authorizes. 35 U.S.C. §103 is very specific in requiring that a rejection on the grounds the invention "would have been obvious" must be based on a comparison between the prior art and the subject matter as a whole at the time the invention was made.

In any event, in view of the above amendments and remarks, the rejected independent claims 39, 46, 76 and new claim 78 are believed allowable in view of the failure of the applied references either alone, or in combination to disclose, teach or suggest the specifically discussed features of the independent claims.

As claims 40-44 and 47-75 are dependent upon claim 39 which is believed allowable in view of the above amendments and remarks, these claims are believed allowable as well, and thus no further discussion is provided. Similarly, where dependent claims 51, 52, 54 and 55 are also rejected, under 35 U.S.C. § 103(a), as being unpatentable over the Ingromat reference in view of Herrington '413, and further in view of either McCormick et al. '882 or Derby '166. The Applicant believes that as these claims are dependent upon claim 39 allowable in view of the above remarks and amendments, these claims are allowable as well and thus no further discussion is provided.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised anticipation and obviousness rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejection(s) or applicability of the the Ingromat-Cleaner CH 29 publication 04, Herrington '413, McCormick et al. '882 and/or Derby '166 references, the Applicant respectfully requests the

Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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